सत्यमेव जयते

THE
JHARKHAND GAZETTE
EXTRAORDINARY
PUBLISHED BY AUTHORITY

No. 287 **22 Vaishakh, 1938 (S)**

Ranchi, Friday, 12th May, 2017

Urban Development & Housing Department

Resolution

27 April, 2017

Subject :- Jharkhand Fecal Sludge & Septage Management Policy, 2017

1. BACKGROUND

Memo No- Suda/Amrut/FSSM-Policy/29/2017/2898-- Solutions for effective and sustainable faecal sludge management (FSM) presents a significant Indian need. FSM is a relatively new field, however, it is currently rapidly developing and gaining acknowledgement.

One the major challenges in urban sanitation is the collection, treatment and disposal or reuse of Faecal Sludge and septage. Adequate facilities and services for collection, transportation, treatment and disposal of Faecal sludge do not exist in most Indian cities and towns.

Most of the on-site sanitation systems (OSS) are emptied manually in the absence of suitable facilities. Ideally, a septic tank system should be cleaned every two to three years as per the Central Public Health and Environmental Engineering Organisation (CPHEEO) guidelines. However, ignorance of maintenance and operational conditions often results in accumulation of organic sludge, reduction in effective volume and hydraulic overloading, which ultimately causes system failure and the release of

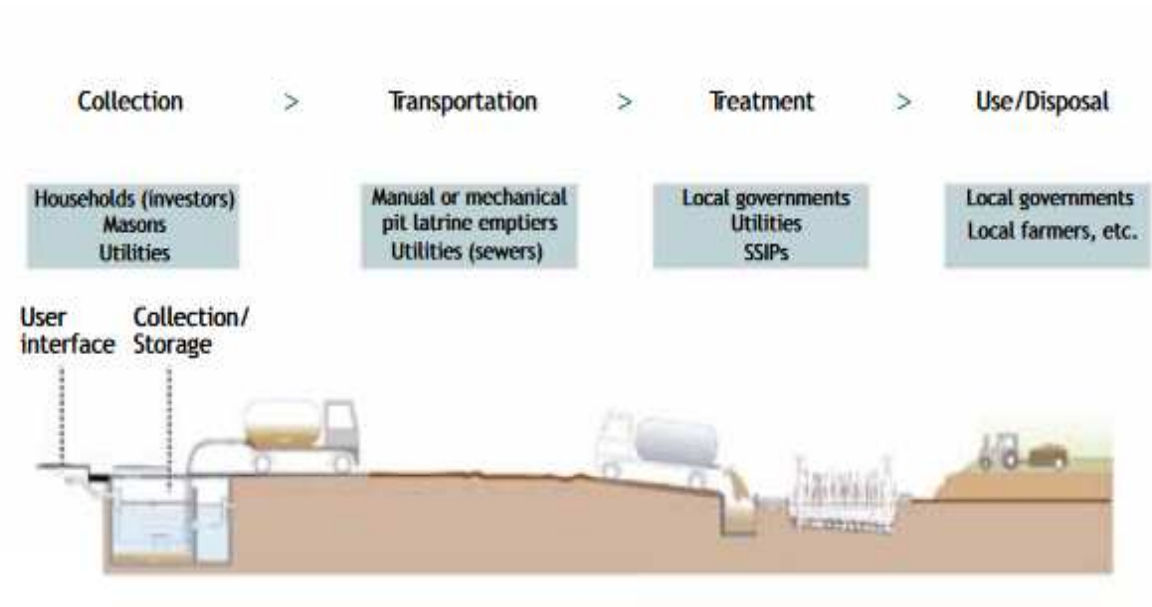
partially treated or untreated septage from the septic tank. Private operators often do not transport and dispose of septage far away from human settlements. Instead, they dump it in drains, waterways, open land and agricultural fields.

What Is Faecal Sludge?

Faecal sludge (FS) comes from onsite sanitation technologies, and has not been transported through a sewer. It is raw or partially digested, a slurry or semisolid, and results from the collection, storage or treatment of combinations of excreta and black water, with or without greywater. Examples of onsite technologies include pit latrines, unsewered public ablution blocks, septic tanks, aqua privies, and dry toilets. FSM includes the storage, collection, transport, treatment and safe end use or disposal of FS. FS is highly variable in consistency, quantity, and concentration. Faecal sludge from septic tanks is specifically termed as septage.

Effective management of FS systems entails transactions and interactions among a variety of people and organisations from the public, private and civil society at every step in the service chain, from the household level user, to collection and transport companies, operators of treatment plants, and the final end user of treated sludge. Sewer systems and FSM can be complementary, and frequently do exist side-by-side in low-income countries.

For sustainable implementation and ongoing operation, FSM requires an integrated systems approach incorporating technology, management and planning,



Faecal Sludge Management Value Chain

2. WHY FAECAL SLUDGE AND SEPTAGE MANAGEMENT

Faecal Sludge Management (FSM), which has largely been overlooked in the past, needs immediate attention in order to address the huge gap that currently exists between sewerage infrastructure and the sewage generated in the cities of Jharkhand.

3. NEED FOR JHARKHAND FAECAL SLUDGE MANAGEMENT POLICY, 2017

Jharkhand is one of the least urbanized states in the country, but it is urbanizing fast. Therefore, the concern over providing civic amenities to the urban poor is catching up with policy makers. As per the 2011 census, the total population of Jharkhand is around 33 million of which 5.57 million stay in urban areas. Urban population is growing at decadal growth rate of 33%

Jharkhand's urban population is spread across 45ULBs. However it is less than the national average of 31.16 percent. According to the 2011 census, 16.87 percent of the state's population resides in notified urban areas. By 2026, the share of the urban population to the state's total population will reach 28.83 percent.

There is a need to focus on safe disposal of human/animal excreta as an essential factors for improved health outcomes and improved sanitation facility. Sanitary conditions of the households by type of latrine facility in Jharkhand shows that 67.2 percent of urban households have latrine facility within the premises which is slightly less than India figures which reflect 81.4 urban households have latrine facility within the premises.

For disposal of the human excreta the state is depended upon sewer lines and on septic tanks. To achieve the target of open defecation free state the human excreta needs to be treated properly so that no sludge is discharged in the open or is let to be released in the water bodies.
The matter becomes more important because the cities/towns in Jharkhand have 14.0 % sewer facility and mainly the city is depended upon septic tank which is 49.2 % for disposal of the human excreta. As the septage and sludge management is absent the disposal of the human excreta from the septic tank is either done in the open or released in the water bodies.

4. TITLE- This policy shall be called as **JHARKHAND FAECAL SLUDGE MANAGEMENT POLICY, 2017**

5. VISION

All Jharkhand cities and towns become totally sanitized, healthy and livable, and to ensure and sustain good sanitation habits, safe disposal of the faecal sludge with improved septage management to achieve good public health and environmental control for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women.

6. KEY SANITATION POLICY ISSUES

In order to achieve the above Vision, following key policy issues must be addressed:

6.1 **Poor Awareness**: Faecal Sludge and septage management has been accorded low priority and there is poor awareness about its inherent linkages with public health.

6.2 **Social and Occupational aspects of Sanitation**: Despite the appropriate legal framework, progress towards the elimination of manual scavenging has shown limited success, little or no attention has been paid towards the occupational hazard faced by sanitation workers daily.

6.3 **Fragmented Institutional Roles and Responsibilities**: There are considerable gaps and overlaps in institutional roles and responsibilities at the national, state, and city levels.

6.4 **Lack of an Integrated City-wide Approach**: Faecal Sludge and septage management investments are currently planned in a piece-meal manner and do not take into account the full cycle of safe confinement, treatment and safe disposal.

6.5 **Limited Technology Choices**: Technologies have not been focused on and the disposal techniques are not environmental friendly or cost-effective, neither the sustainable investments for safe management and disposal has been thought off on a large scale.

6.6 **Reaching the Un-served and Poor**: Urban poor communities as well other residents of informal settlements have been constrained by lack of tenure, space or economic constraints, in obtaining affordable access to safe Faecal Sludge and septage management. In this context, the issues of whether services to the poor should be individualised and whether community services should be provided in non-notified slums should be addressed. The issue of subsidies inadvertently reaching the non-poor should be addressed by identifying different categories of urban poor.

6.7 **Lack of Demand Responsiveness**: Faecal Sludge and septage management has been provided by private agencies in a supply-driven manner, with little regard for environmental and health concerns and by applying short cut methods.

7. POLICY GOALS

The overall goal of this policy is to transform Urban India into community-driven, totally sanitized, healthy and livable cities and towns.

The specific goals are:

7.1 Awareness Generation and Behaviour Change

7.1.1 Generating awareness about faecal sludge and septage management and its linkages with public and environmental health amongst communities and institutions;
b. Promoting mechanisms to bring about and sustain behavioural changes aimed at adoption of healthy sanitation practices;

7.2 Open Defecation Free Cities

Achieving Open Defecation Free Cities

All urban dwellers in Jharkhand will have access to and use safe and hygienic faecal sludge and septage management facilities and arrangements so that no one spills the faecal waste in the open. In order to achieve this goal, the following activities shall be undertaken:

7.2.1 Promoting access to households with safe faecal sludge and septage management facilities (including proper disposal arrangements);

7.2.2 Promoting community-planned and managed faecal sludge and septage management wherever necessary, for groups of households.

7.2.3 Adequate availability and 100 % upkeep and management of Public Sanitation facilities in all Urban Areas, to rid them of open defecation and environmental hazards;

7.3 Integrated City-Wide Sanitation

Re-Orienting Institutions and Mainstreaming Sanitation

7.3.1 Mainstream thinking, planning and implementing measures related to faecal sludge and septage management in all sectors and departmental domains as a cross-cutting issue, especially in all urban management endeavours;

7.3.2 Strengthening national, state, city and local institutions (public, private and community) to accord priority to sanitation provision, including planning, implementation and O&M management;

7.3.3 Extending access to proper faecal sludge and septage management facilities for poor communities and other unserved settlements;

7.4 Sanitary and Safe Disposal

100 % of human excreta and liquid wastes from all sanitation facilities including toilets must be disposed of safely. In order to achieve this goal, the following activities shall be undertaken:

7.4.1 Promoting proper functioning of faecal sludge and septage management systems and ensuring proper collection and disposal of the faecal sludge;

7.4.2 Promoting recycle and reuse of treated waste water for non-potable applications wherever possible will be encouraged.

8. OBJECTIVES AND SCOPE

The key objective of the FSSM Policy is to set the context, priorities, and direction for, and to facilitate, state-wide implementation of FSSM services in all ULBs such that safe and sustainable sanitation becomes a reality for all in each and every household, street, town and city. More specifically, the Policy will:

8.1 Mainstream FSSM by the year 2019, and ensure that all benefits of wide access to safe sanitation accrue to all citizens across the sanitation value chain from containment, extraction, transportation, treatment, and disposal / re-use of all Faecal sludge, septage and other liquid waste and their by-products and end-products.

8.2 Suggest and identify ways and means, including the methods and resources, towards creation of an enabling environment for realising safe and sustainable FSSM in Jharkhand.

8.3 Define the roles and responsibilities of various government entities and agencies, and of other key stakeholders such as the private sector, civil society organisations and citizens for effective implementation of FSSM services.

8.4 Enable and support synergies among relevant Central and State Government programs such as SBM, AMRUT, Smart Cities Mission, to realise safe and sustainable sanitation for all at the earliest, possibly by the year 2019.

8.5 Adopt an appropriate, affordable and incremental approach towards achieving laid out environmental standards for FSSM.

Unless otherwise specified, the scope of this Policy extends to all the projects, programs and schemes of the Jharkhand Government that facilitate and support sanitation services, urban development and improved delivery of services in urban and peri-urban areas and any other approved program or scheme by the private sector. It

also covers the initiatives undertaken and/or supported by all the Ministries, Departments, Agencies, Authorities and Public Sector Undertakings in the State that have a bearing on sanitation services in urban and peri-urban areas. Further, the Policy applies to every urban local body, outgrowths in urban agglomerations, census towns as declared by the Registrar General and Census Commissioner of India, notified areas, notified industrial townships, areas under the control of Indian Railways, airports, airbases, Ports and harbours, defence establishments, special economic zones, State and Central government organisations within the State, places of pilgrims, religious and historical importance as may be notified by the State government from time to time.

9. POLICY IMPLEMENTATION ROLES AND RESPONSIBILITIES

Responsibility for Establishing Basic Regulatory Requirements for Faecal Sludge Management Rests with ULBs. State Urban Development Agency will maintain an oversight role and will Integrate and interpret the requirements of the several applicable Federal laws and issue regulations and guidance to ensure that they are applied consistently toward municipal sludge management;

9.1 **Establish regulatory requirements that promote beneficial sludge use:**

9.1.1 Provide standards that establish contaminant levels and management practices for acceptable municipal sludge use and disposal:

9.1.2 Establish minimum requirements for Jharkhand State sludge management programs providing sufficient discretionary authority for States to tailor their programs and actions to local variation:

9.1.3 Enforce adherence to Federal requirements where not enforced by ULBs:

9.1.4 Provide guidance and information on sludge treatment technologies and practices and direct technical assistance to States and local governments:

9.1.5 Support research and development, and encourage the demonstration of projects to facilitate the advancement and use of new or improved technologies. Responsibility for Ensuring Effective Sludge Management by ULBs rests primarily with JUIDCO.

9.1.6 JUIDCO shall establish and maintain regulatory and oversight program adequate to implement State and Federal requirements;

9.1.7 JUIDCO to provide active assistance to local ULBs in planning their sludge management.

9.2 **Responsibility to Operate and Maintain Appropriate Sludge Management Systems Rests with Each Municipality.**

9.2.1 Municipalities are responsible for operating and maintaining sludge management systems which comply with applicable Federal and State regulatory requirements.

9.2.2 Municipalities are responsible for maintaining sludge use and disposal capacity sufficient to meet the needs of their wastewater treatment systems.

9.2.3 Municipalities are responsible for controlling the discharge of contaminants into their sewerage systems so that sludge quality is suitable for meeting regulatory requirements and local management

10 WHAT POLICY ENVISAGES:

The policy specifically endorses the following core principles:

10.1 To protect public health
10.2 To protect the environment and the State's water resources
10.3 To promote proper functioning of network based sewerage systems alongwith the septage system and ensure e connections of household.
10.4 Treatment of sewage and sludge is required prior to discharge into the environment.
10.5 Promoting recycle & reuse of treated sewage/septage for nonpotable applications.
10.6 To make Sewerage/septage project economical and environmentally sustainable
10.7 Inclusive and participatory decision making.
10.8 Transparent decision making processes to achieve socio-environmental as well as economic financial objectives.
10.9 Capacity building for enhanced institutional ability to govern the sector effectively.
10.10 Ensuring, protecting and optimizing investments.
10.11 Public Private Partnership (PPP) in the most appropriate manner.
10.12 Public outreach for environmental and health related outcomes.
10.13 Establishment of an efficient, effective, affordable and accountable system for managing urban sewerage and septage management

11 TREATMENT MECHANISM AND METHODS

For treatment of the faecal sludge any of the following mechanism and methods may be selected depending upon the sludge type and quantity.

11.1 **Mechanism**

11.1.1 Physical mechanisms

a. Gravity separation
b. Filtration
c. Evaporation and transpiration
d. Centrifugation
e. Heat drying
f. Screening

11.1.2 Biological mechanisms

a. Metabolism
b. Temperature
c. types of microorganisms
d. Aerobic treatment
e. Composting
f. Anaerobic treatment
g. Nitrogen cycling
h. Pathogen reduction

11.1.3 Chemical mechanisms

a. Alkaline stabilisation
b. Ammonia treatment
c. Coagulation and flocculation
d. Conditioning
e. Disinfection of liquid effluents

11.2 Methods

11.2.1 Established faecal sludge treatment technologies

a. Co-composting of faecal sludge
b. Co-treatment in waste stabilisation ponds
c. Deep row entrenchment

11.2.2 Transferred sludge treatment technologies

a. Anaerobic digestion
b. Inhofe tank
c. Sludge incineration
d. Mechanical sludge treatment
e. Lime addition

11.2.3 Innovative technologies for faecal sludge treatment

a. Vermi composting
b. Black Soldier flies
c. Ammonia treatment

12 OPERATION AND MAINTENANCE

There are several important factors that need to be considered when planning FSTPs which will have a direct impact on O&M and monitoring. Since O&M aspects are important for the overall long-term success of the programme, O&M planning, including the financial provision of funds, should be included in the terms of references for the design of each FSTP. Furthermore, the O&M plan should be reviewed and approved along with engineering designs and specifications, including the operation and maintenance cost:

12.1 location of the FSTP and its proximity to residential areas;
12.2 volumes and schedules of FS collection;
12.3 degree of mechanisation of technologies; and
12.4 final enduse or disposal of end product
12.5 recovering the money by way of user charges
12.6 running it on PPP mechanism and charging the household on number of trips made by the vaccum succor trucks

13 STATE-LEVEL IMPLEMENTATION STRATEGY

JUIDCO will develop and issue an FSSM Implementation Strategy and Plan Guidelines. These Guidelines will provide an overall state-level framework, objectives, timelines and implementation plans to the ULBs. The Implementation Strategy will cover aspects such as implementation targets, framework for engagement of the private sector, training and capacity building, behavior change and social communication, M&E framework, specific roles and responsibilities of various entities, guidelines to develop ULB-level plans, and funding mechanisms.

ULB-specific FSSM Strategy and Action Plan conforming to the State Policy will be developed by each ULB based on the State FSSM Implementation Strategy and Plan Guidelines.

13.1 How the policy will be executed in the in the cities/towns

A three phase approach will be designed to implement the policy.

13.1.1 In the financial year 2017-18 it will be implemented in all the notified Nagar Nigam.
13.1.2 In the financial year 2018-19 it will be implemented in all the notified Nagar Parisad.
13.1.3 In the financial year 2019-20 it will be implemented in in all the notified Nagar Panchayat

All efforts will be done to follow the execution method outlined above for the cities towns, however, depending upon the central/state programme and budget availability the cities/towns might be chosen from any category in any financial year. Due to environmental factors the cities/towns may also be chosen out of these to implement the plan.

13.2 Mix of sewerage and faecal Sludge management

The ULB may have a mix of the sewerage and the septage plan or only septage plan depending upon the population, terrain and available fund and technological options available. In the bigger ULBs a mix of sewerage and septage may be applied depending upon the ground situation and the fund availability while in the smaller towns the septage may be given preference over the sewer lines.

In bigger cities and in the plain areas the preference will be given to the sewer lines. The plans will be made accordingly and JUIDCO will be the agency to decide on the modalities.

14 ULB LEVEL IMPLEMENTATION PLAN

14.1 Plan Development

Each ULB will develop a detailed FSSM plan in conformity to the National FSSM policy and respective state guidelines on FSSM. Citywide assessment of FSSM is the key step for FSSM process planning. Cities need to undertake assessment of the current situation of FSSM around the five areas detailed out as per Annexure-1 for developing a FSSM plan. Such plan should be technically appropriate and financially feasible. Assessment in each area entails review of available information at city level, identifying information gaps, and conducting field studies where necessary.

14.2 Behavioural Change

In addition, adequate attention and focus has to be paid to public outreach and behaviour change communications to ensure timely and necessary participation of all the key stakeholders. The range of stakeholders may include on-site sanitation system users, NGOs, municipal employees, relevant private sector firms, elected representative and the media.

14.3 Way to Implement It

Each ULBs will have an action plan whereby it will be mandatory to clean the septic tanks of individual houses, offices, hospitals, institutions, universities, malls, cinema halls, multiplexes, community and public toilets etc. at an interval of two years, the cleaning will be followed for all the properties having either septic tank. A data base have to be developed for all such properties having the septic tank and will be monitored so that necessary cleaning is done at an interval of 2 years. A MIS will be developed accordingly to monitor the progress.

Each ULB-level FSSM plan will have a specific monitoring and evaluation framework to continuously gauge implementation progress and document lessons for constant improvement. It is very important that cities work systematically with each group of stakeholder to ensure alignment of goals and buy-in. The ownership for all activity relating to FSSM must be driven by the Municipal /ULB head.

15 FINANCIAL RESOURCES

Financing for FSSM Plans may be available under AMRUT; 14th Finance Commission funds, or under any other scheme. Moreover, the emphasis should be on improving the efficiency of existing sanitation infrastructure and service delivery.

ULBs are encouraged levy sanitation tax/ user charges to meet the O&M cost for effective FSSM operation. Further, funding from private sources and operators may also add to the required financial resources.

16 MONITORING & EVALUATION

At the state level, State Urban Development Agency (SUDA)/Jharkhand Urban and Infrastructure mDevelopment Corporation (JUIDCO) will adopt San-Benchmark framework for revised service level benchmark for sanitation that assess performance of citywide sanitation, which also captures on-site sanitation systems and sewage management.

State Urban Development Agency (SUDA)/JUIDCO will develop an M&E framework to measure cities' performance, and also devise data collection and reporting systems using indicator framework developed for San-Benchmark. This will be aligned with the 14th Finance Commission condition of publishing the service level benchmark to avail performance grant. ULBs in turn need to develop database related to on-site sanitation system, robust reporting format to track compliance of households (establishments, etc.) with outcomes and process standards.

A cell will be created inside JUIDCO to monitor and evaluate the faecal sludge management operation. The cell will be created by funds from external agency funding or from the funds of 14th finance commission or through the state budget.

As per the city plan a data base developed by the cities/towns for all such properties having the septic tank in different categories of propertied i.e. residential, commercial, industrial, intuitional etc. will be monitored on daily basis at JUIDCO level and will be monitored in such a way that necessary cleaning is done at an interval of 2 years. A Management Information System (MIS) will be developed accordingly to monitor the progress.

17 TAX INCENTIVE

The tax incentive will apply in following conditions:

17.1 All the Individual Households of RWAs will treat their sludge in a decentralised manner where the system is not connected by the sewer will get the property tax rebate of 10%.

17.2 All the new apartments which will be constructed and are not having the sewer lines connection will have to design their own sludge management system and will use the recycled water in their premises. In doing so they will get a rebate of 10% of the construction permit fee or Rs. 2,00,000/- (Two lakhs) whichever is less.

17.3 All the new malls, big hotels, industries, clubs, colleges, universities, hospitals, sports stadiums etc. which will be constructed and are not having the sewer lines connection will have to design their own sludge management system and will use the recycled water in

their premises. In doing so they will get the rebate of 10% of the construction permit fee or Rs. 2,00,000/- (Two lakhs) whichever is less.

18 **Septage Tax** -A separate head of the tax namely called 'Septage Tax' will be created which may be levied in the property tax for the operation and maintenance of the sepatge.

19 **CAPACITY BUILDING & TRAINING**

The State Government, with the support of Ministry of Urban Development, GoI, will formulate a strategy on capacity building and training on FSSM to support the State and ULBs to build their personnel capacities and organizational systems for delivery of sanitation services. It will identify agencies that will train its state level, ULB personnel and orientation of elected representatives on aspects re
lated to FSSM. These agencies could be specialist agencies of the state government, academic institutions and private sector organizations. This will also need to focus on capacity building, i.e. not just training but also development of systems and capacities of ULBs in sanitation, in line with the Urban Sector Reforms that the state may be implementing under AMRUT, SMART cities and SBM. ULBs will need to provide training on sanitation to their own staff – using the specialized agency selected by state government. They will need to utilize ongoing Govt. of India and State Government Schemes for training and capacity building in order to achieve this. Training will also need to be imparted to private sector players and NGOs to help them engage and deliver effectively in the provision of FSSM services.

20 ***EXPECTED OUTCOMES***

As this Policy is implemented across the State, it is expected to yield significant benefits in terms of improved public health indicators, considerable reduced pollution of water bodies and groundwater from human waste, and resource recovery leading to reuse of treated waste and other end products. Some key projected outcomes are:

20.1 Safe containment, collection and conveyance of 100% human waste to treatment and disposal sites.

20.2 Scheduled emptying of septic tanks or other containment systems at an interval of 2-3 years as recommended by CPHEEO Manual, Ministry of Urban Development advisory on Septage management (2013).

20.3 Safe disposal of all collected waste at designated sites (sewage treatment plants, Faecal sludge treatment facilities, lined pits for safe and scientific disposal, etc.)

20.4 Continuous improvements in efficiency and effectiveness in the entire FSSM chain: containment, collection, conveyance, treatment and disposal.

20.5 Contamination of water bodies and groundwater from human waste (Faecal matter) reduced to zero levels in all the towns and cities.

20.6 Nuisance from human waste reduced to minimum levels, resulting in nuisance-free living space.

20.7 Maximum reuse of treated sludge as fertilizer in farmlands, parks, gardens and other such venues, reuse of treated wastewater, as source of energy where feasible, and any other productive uses.

21 LEGISLATIVE AND REGULATORY CONTEXT

21.1 Central Laws and Rules

The legal context for FSSM includes environment laws, laws for the legal prohibition of "manual scavenging" and institutional laws that provide for the establishment, powers and functions of local authorities. The first category, which includes the Environment (Protection) Act, 1986 and the Water (Prevention and Control of Pollution) Act, 1974 provide a framework for control of effluent, wastewater and septage discharge. Further, the Municipal Solid Waste (MSW) Rules, 2016 under the Environment (Protection) Act apply to the final and safe disposal of post-processed residual Faecal sludge and septage to prevent contamination of ground water, surface water and ambient air. Further, the MSW Rules 2016 will apply to the final and safe disposal of post-processed residual Faecal sludge and septage to prevent contamination of ground water, surface water and ambient air. Further, the MSW Rules 2016 will also apply for disposal and treatment of Faecal sludge and septage, before or after processing, at landfills and for use as compost.

The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 put a ban on dry latrines, i.e., latrines with no water-seal or flushing mechanism, and the employment of persons for manually carrying human excreta. This was supplemented in 2013 with the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 by which "hazardous cleaning" in relation to sewers and septic tanks was also banned. The law now provides that manual cleaning of sewers and septic tanks, if necessary, may be carried out only in very controlled situations, with adequate safety precautions, and in accordance with specific rules and protocols for the purpose.

All public and private sector staff should adhere to safety norms as provided in the Manual on Sewerage and Sewage Treatment published by the Ministry of Urban Development and such other safeguards under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 and that the ULB may provide under its own rules. For disposal of septage, the ULB will need to follow the standards set out in the Environment (Protection) Act, 1986, and MSW Rules 2016 depending on the mode of disposal.

21.2 State Laws, Rules and Regulations

The state laws rules and regulation will be framed by Urban Development and Housing Department (UDHD).

21.3 Formation of ULB level Rules and Regulations

It is recommended that ULBs formulate rules and regulations, as well as planning and implementation for Faecal sludge and septage management. This should be

supplemented with a review the building regulations to ensure proper construction of adequate onsite facilities for anticipated loads, and for ensuring safe disposal. Sites selected for sludge application by the ULB and by other parties (like residential layouts) would need prior consent to operate from the competent authority [like the State Pollution Control Board].

Rules, regulations and operative guidelines for Faecal sludge and septage management should address:

21.3.1 Delineation of private (individual houses, groups housing, institutions etc.) and public responsibilities (urban local bodies and other local authorities) in relation of Faecal sludge and septage management.

21.3.2 Details of the planning and implementation process for carrying out safe and sustainable management of all Faecal sludge and septage. This may be integrated with overall city land use planning, with the time based plan of holistically addressing waste water management via on-site, decentralised or centralised systems.

21.3.3 Design of septic tanks, pits etc. (adapted to local conditions), including siting, and methods of approval of building plans, or retro-fitting existing installations to comply with rules.

21.3.4 Special provisions for medium and large format real estate developments.

21.3.5 Periodicity of desludging, and O&M of installations and the responsibilities of householders (owner/occupant).

21.3.6 Operating procedures for desludging including safety procedures.

21.3.7 Licensing, record-keeping, monitoring and reporting arrangements for Faecal sludge and septage service providers.

21.3.8 Methods and locations of transport (conveyance), treatment and safe disposal.

21.3.9 Tariffs or cess/tax etc. for septage management in the city.

21.3.10 Penalty clauses for untreated discharge for households as well as desludging agents.

21.3.11 Regular monitoring and evaluation of the entire process of FSSM.

21.3.12 Training, accreditation, education and awareness programs

22 **Policy evaluation:**

22.1 Policy may be reviewed as and when required for assessing its effectiveness and making changes if necessary.

22.2 This policy shall come into force from the date of issue of this resolution.

23 **Power of the State Government**

23.1 Notwithstanding anything contained in the foregoing paragraphs of the Jharkhand Faecal Sludge & Septage Management Policy, 2017 the State Government by issuance of notification in the official gazette may amend or withdraw any of the provisions and / or the schemes mentioned herein above.

23.2 Interpretation - Should any doubt arise as to the interpretation of any of the provisions of these Rules, the matter shall be referred to the Urban Development and Housing Department, whose decision thereon shall be final.

By the order of the Governor of Jharkhand,

Arun Kumar Singh,
Principal Secretary to Government.

Printed & Published by the Superintendent of Jharkhand Government Press, Doranda, Ranchi.
Jharkhand Gazette (Extraordinary) 287-- 50.